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**(54) EXHAUST GAS CLEANING CATALYST AND  
EXHAUST GAS CLEANING METHOD**

**(57) Abstract:**

**PROBLEM TO BE SOLVED:** To improve durability by carrying a noble metal selected from Pt, Pd and Rh, Ir and a NO<sub>x</sub> occluding element selected from alkali metals, alkaline earth metals and rare earth elements on a carrier composed of a porous oxide to suppress the poisoning of the NO<sub>x</sub> occluding element.

**SOLUTION:** In an exhaust gas cleaning catalyst for reducing and cleaning NO<sub>x</sub>, the carrier composed of the porous oxide is provided and at least one kind

of noble metal selected from Pt, Pd and Rh is carried on the carrier. Ir is carried in addition to these noble metals. Because Ir exhibits high reduction activity and is more excellent in heat resistance than Pt, Pd and Rh, SO<sub>x</sub> released from the NO<sub>x</sub> occluding element poisoned by sulfur in an enriched atmosphere is reduced and cleaned by carrying Ir to restore the NO<sub>x</sub> occluding capacity of the NO<sub>x</sub> occluding element. In addition, at least one kind of the NO<sub>x</sub> occluding element selected from the alkali metals, the alkaline earth metals and the rare earth metals is carried.

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